

# **Analysing the development of institutional policies for sustainability and quality of OERs with a focus on the Australian context**

**Theme: Community Development**

**Sub-theme: Open Educational Resources**

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## **BACKGROUND**

Stimulated by funding from benefactors such as the Hewlett Foundation and UNESCO, the OER movement has been growing rapidly since 2001, providing educational content freely to institutions and learners across the world through the Internet. Many organizations perceive benefits both for themselves and for learners elsewhere in distributing their learning resources in this way. The Massachusetts Institute of Technology's (MIT) OpenCourseWare initiative (OCW), set up in 2001, makes content available freely from most of MIT's courses and has provided the inspiration for many similar institutional projects. When the MIT OCW site was officially launched the following year, over 500 courses were available. By 2004 there were 900, and the total reached 1250 in 2005. Even more impressive were visitor numbers. By 2005, MIT's OCW site had received more than 8.5 million visits, and visitors were growing by 56% per annum (MIT 2006). Equally significant was the speed with which the MIT OCW site demonstrated its value to the institution. In 2006, it was reported that 35% of new MIT students had based their choice of institution, in whole or in part, on their exposure to the MIT OCW site. It was also reported that 71% of MIT students using the OCW site found its content helpful or extremely helpful in their studies (MIT 2006). As expected, the MIT OCW project provided a model for other universities worldwide and saw the establishment of the OpenCourseWare Consortium (OCWC). Currently, the OCWC has over two hundred institutional members worldwide (OCW 2008).

By the end of 2006, there were signs that the OER movement had reached maturity. An important sign were developments in Europe, where alternatives to the MIT model emerged. One of these was OpenLearn, launched by the Open University (OU) in October 2006, which was intended to publish the widest possible selection of OU course materials. It was also intended to do much more: its explicit goal was to engage and support self-directed learners using the latest Web 2.0 technologies. The site would not only host user-generated content (material created by individuals and organisations outside the higher education sector), it would also provide social networking tools to empower users to build their own learning communities (Shuller 2006). By mid-2007, 560,000 individuals had visited the OpenLearn site. In a single week in June 2007, the site had 8,000 visitors from the UK, 6,000 visitors from the United States and another 4,500 from the rest of the world. More importantly, there were 19,000 registered users (Taylor 2007). By April 2008, over 4,400 OpenLearn users had become fully-fledged Open University students. This represented additional teaching income of £2.7 million for the institution (Gourley & Lane 2009).

These initiatives form what is now known as the open educational resource movement, which promotes "the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes" (UNESCO 2002, p. 24). While the term "open educational resources" was first adopted by UNESCO in 2002, it is in the OECD report, *Giving Knowledge for Free* (2007, p. 10), that the definition of OER currently most often used stands as "digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research". This is the definition that will be adopted in this paper, although in the context of being aware of a wider interpretation.

Currently, many universities around the globe have launched OER projects (more than 300 universities). Millions of learners have benefited from learning through OER materials, and many educational institutions, mostly distance education providers, have obtained significant rewards in terms of enhancing their reputations, increasing student enrolment and developing innovative ways to produce distance learning materials (Wiley & Gurrell 2009). Also, OERs have contributed significantly to the proliferation of virtual communities of learning, where students, teachers and experts in their fields can discuss, make contributions and learn with each other through online collaboration (D'Antoni 2008). However, we still have much to learn about the OER movement. It is still grappling with issues such as resistance to giving away information and knowledge for "free"; at no cost and free to use and re-use. Licensing, intellectual propriety and copyright of OERs are also matters that remain ambiguous to educational institutions. In a similar fashion, many questions associated with policy development, sustainability and quality of OERs continue to be unanswered and under researched (D'Antoni 2008). In fact, according to UNESCO (D'Antoni 2008, p. 11), the above concerning matters are listed amongst the 14 priority issues that deserve attention for further development of OERs, with "awareness raising and promotion" being the first priority.

### **OERs IN AUSTRALIA**

In Australia, there has been some national interest in OERs. For example, Macquarie University with its Macquarie E-Learning Centre of Excellence (MELCOE) in Sydney, which was singled out for special mention in the 2007 OECD report surveying worldwide OER initiatives. The authors of the report noted that MELCOE specialises in developing open source software tools and open standards for e-learning (OECD 2007). Although MELCOE has had some limited success in this area, Macquarie remains on the margins of the OER movement (Suzor 2006). The University of Southern Queensland (USQ), one of the DEHub university partners, also has a clear OER strategy in place. USQ remains the only Australian member of the OpenCourseWare Consortium (OCWC), which it joined in 2007. At present, the USQ OCW site offers sample courses from each of the institution's five faculties and also courses from its Tertiary Preparation Program. USQ is currently exploring the means by which it can expand the number of courses available on its OCW site, and structure these in such a way that students will be able to formally undertake assessment for these courses, and then claim exemptions if they later choose to enrol in a full undergraduate award program.

Also, the Queensland University of Technology (QUT) has developed the Australian jurisdiction-specific licenses from the generic Creative Commons licenses (Fitzgerald 2009). Creative Commons is a non-profit corporation dedicated to making it easier for people to share and build upon the work of others, consistent with the rules of copyright (OECD 2007). There have also been some signs of changing attitudes amongst other universities. Seven Australian universities (ANU, Griffith, Swinburne, Melbourne, RMIT, UNSW, UWA and Victoria) have released teaching materials through iTunes U. Most of this material consists of podcasts available only to students and staff of the institution. However, individual universities (such as Victoria University) have opted to release their iTunes U podcasts into the public domain. Interest in OERs is also growing in the vocational education (VET) and school sector (Browne 2009). In fact, there have been several innovative activities in Australia in order to make learning resources shareable in education such as the AEShareNet licensing, and LORN from the Australian Flexible Learning Framework, the Australian National Data Service (ANDS), amongst others. However, most of the institutional policy issues related to licencing, copyright, intellectual property and so forth still remain unsolved.

It appears that the use and adoption of OERs to their full potential is a long way off. Even so, there have been some important initiatives regarding OERs in Australia, however, the lack of a national framework and research to support educational institutions (Fitzgerald 2009), will certainly limit and slow down the process of adoption, or even prevent universities from

pursuing future venues to better support current students, attract new ones and compete against other Australian and international institutions. As a matter of fact, research conducted by UNESCO has identified that the higher education sector is the lead stakeholder for the dissemination and development of OERs (D'Antoni 2008).

## **SUSTAINABILITY**

Although most OER projects start with external funding, eventually these projects will have to search for sustainable ways to fund themselves. This is perhaps the most significant issue in relation to the OER movement. As Smith and Wang (2007) point out, for an OER initiative to be sustainable in the long term, it needs to create value for the host institution. Different sustainability models have been discussed in the literature (Dholakai, King, & Baraniuk 2006; Downes 2007; Humbert, Rébillard, & Rennard 2008; Lane 2008; Schuwer & Mulder 2009; Smith & Wang 2007). The strengths and weaknesses of some of these models are examined below:

*Advertising model* - Under this model, an OER initiative funds itself by selling online advertisements. Open source sites have used this model with some success. It is unclear, however, if this model would be acceptable in a university context.

*Endowment model* - In its pure form, this model assumes that an OER project obtains base funding from sponsors and is sustained by the interest it generates. Although the pure form of the Endowment model appears to be no more than wishful thinking, it has been realised in practice.

*Commercial sponsorship model* - Perhaps more acceptable than the selling of, say, banner ads would be long-term sponsorship by a private company. However, no OER initiative has yet succeeded in funding itself in this manner.

*Donations model* - Under this model, the OER project requests and receives donations from visitors to the site. This model is at least feasible, as a number of successful open source projects rely substantially on individual donations.

*Consultancy model* - Under this model, a university underwrites its own investment in OER by selling its expertise to other institutions. The difficulty is that a university must first build up its expertise and then find sufficient customers.

*Consortium model* - According to this model, the costs of an OER project are shared with other members of a consortium. The OCWC provides an example of this model with around 200 institutional members, each paying an annual fee. However, the long-term sustainability of the OCWC is still not clear.

*Institutional model* - MIT and OU are often cited as examples of this model. Both institutions have announced that their institutional gains from their OCW sites have been so significant that they will fund the operating costs of these sites from their fixed budgets. It should be noted, however, that MIT and OU are hardly typical. MIT contributed only US\$ 1 million to the costs of creating MIT OCW. The Hewlett and Mellon Foundations provided an additional US\$ 11 million. OU has also benefited from support from the Hewlett Foundation and continues to actively seek alternative ways to fund its OER projects.

## **QUALITY**

Even though the sustainability of an OER project appears to be one of the biggest challenges faced by the movement (Downes 2007; Lane 2008; OECD 2007; Wiley 2006), another challenge that has emerged, as more and more OERs become freely available, is the quality of these resources. In fact, "there is a desperate demand in the world for high-quality OER" (Wiley & Gurrell 2009, p. 19). Different from non-OER educational material, OERs are in their large majority, accessible at no cost and open to re-use, change and distribute. The free and

open characteristics of OERs have contributed to suspicions about the quality of these resources. Also, as Wiley and Gurrell argue, many people believe that “free educational resources must necessarily be of poor quality” (Wiley & Gurrell 2009, p. 19). On the other hand, there is also the assumption that all OERs are of good quality (Wiley & Gurrell 2009). Instead, Wiley (2006) believes that, despite issues of accuracy of information transmitted by an OER, its utility and the user’s relationship with the resource is far more important (Wiley & Gurrell 2009). In other words, the concept of quality of an OER can easily vary according to users and their needs.

## **CONCLUSION**

Considering their evolving pace and demonstrable impact on the international higher education sector, the need for further research and development on OERs is evident. Australia has not yet developed a national or institutional level policy framework that can address access, use, re-use and distribution of open educational resources and content, whereas in the US, UK and some other European countries, frameworks are already in place. Even though there have been several funding models to secure the sustainability of OER projects, none of them has been in place long enough to assure their success. As for quality of OERs, attention must be paid to the user’s needs, utility and the accuracy of information delivered by them.

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